

ABSTRACT OF THE DISCLOSURE

5 The time required for the program verify and erase
verify operations can be shortened. The change of
threshold values of memory cells can be suppressed even
if the write and erase operations are executed
repetitively. After the program and erase operations,
whether the operations were properly executed can be
judged simultaneously for all bit lines basing upon a
change, after the pre-charge, of the potential at each bit
line, without changing the column address. In the data
10 rewrite operation, the rewrite operation is not effected
for a memory cell with the data once properly written, by
changing the data in the data register.